



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 18, 2026

Dr. Caleb S. Brooks, Associate Professor
Department of Nuclear, Plasma,
and Radiological Engineering
University of Illinois Urbana-Champaign
Talbot Laboratory, Room 111C, MC-234
104 South Wright St.
Urbana, IL 61801

SUBJECT: UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN – ACCEPTANCE FOR
DOCKETING OF CONSTRUCTION PERMIT APPLICATION (EPID L-2026-NFN-
0001)

Dear Dr. Brooks:

This letter is to inform you that the Nuclear Regulatory Commission (NRC) staff has accepted your application for a construction permit (CP), which was submitted by letter dated March 27, 2026 (Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML26090A463), for detailed technical review. The University of Illinois Urbana-Champaign (U. of I.) submitted this application for a research reactor pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," and section 104c of the Atomic Energy Act of 1954, as amended, to the NRC. The facility, referred to as the U. of I. KRONOS Micro Modular Reactor (KRONOS MMR™), would be based on NANO Nuclear Energy Inc. technology and built in Champaign County, Illinois.

The NRC staff performed an acceptance review of the CP application in accordance with 10 CFR Part 2, "Agency Rules of Practice and Procedure," 10 CFR Part 50, and the NRC's procedures. The NRC staff determined that U. of I. submitted sufficient information in accordance with 10 CFR 2.101, "Filing of application," 10 CFR 50.33, "Contents of applications; general information," 10 CFR 50.34, "Contents of application; technical information," and 10 CFR 51.56, "Environmental report--non-power production or utilization facility," for the NRC staff to begin its detailed technical review and that the application is acceptable for docketing. The NRC staff conducted the acceptance review to confirm that the NRC staff has sufficient information to initiate its detailed safety and environmental technical reviews and establish a predictable review schedule.

During the acceptance review, the NRC staff identified several technical topics that were previously identified and shared with U. of I. during February and March 2026 in the pre-application readiness assessment audit of the draft U. of I. CP application, as documented in the readiness assessment audit report dated April 24, 2026 (ML26103A246). As discussed in the audit report, these topics will require significant early focus by the NRC staff and U. of I. to ensure timely review completion. The NRC staff expects that the following items will require substantial near-term commitment by U. of I. to ensure it can provide necessary information to the NRC staff in a timely manner to support review completion:

- U. of I.'s identification of the graphite grade(s) and qualification approach(es) for the KRONOS MMR™, and its completion of preliminary analyses necessary to support issuance of the construction permit, and
- U. of I.'s demonstration that the preliminary design of the KRONOS MMR™ reactivity control and shutdown systems conforms with principal design criterion 26, "Reactivity control systems."

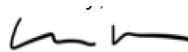
During teleconferences on May 5 and 6, 2026, U. of I. confirmed that certain information related to these two items is readily available for a regulatory audit in response to likely NRC staff audit questions during the detailed technical review. U. of I. also indicated that it expects to develop additional information that could be provided for audit within approximately 3 months. Based on this, the NRC staff determined that acceptance of the application was appropriate at this time, and plans to engage with U. of I. through the audit process, early in the detailed technical review, to address these and other key technical topics identified during the readiness assessment and acceptance review. The NRC staff will also take these items into consideration when developing the review schedule.

The NRC staff will provide a schedule for the completion of the safety and environmental reviews of the application in separate correspondence, to include key milestones and resource estimates, within 30 days from the date of this letter. The docket number established for the U. of I. KRONOS MMR™ is 50-618. This docket number should be included in all future correspondence.

A notice of acceptance for docketing will be published by the Office of the *Federal Register*.

If you have any questions or comments about this matter, please contact me at (301) 415-4067, or via email at Edward.Helvenston@nrc.gov.

Sincerely,



Signed by Helvenston, Edward
on 05/18/26

Edward Helvenston, Senior Project Manager
Non-Power Production and Utilization Facility
Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

Docket No. 50-618

cc w/enclosure: GovDelivery Subscribers

SUBJECT: UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN – ACCEPTANCE FOR
DOCKETING OF CONSTRUCTION PERMIT APPLICATION (EPID L-2026-NFN-
0001) DATED: MAY 18, 2026

DISTRIBUTION:

PUBLIC

RidsNrrDanu Resource

RidsOgcMailCenter Resource

RidsOpaMailCenter Resource

RidsOcaMailCenter Resource

EHelvenston, NRR

JGreives, NRR

MReisiFard, NRR

JRady, NRR

TTate, NRR

LVechioli, NRR

SCuadrado, NRR

HOzaltun, NRR

NParker, NRR

BBurris, NMSS

DBarnhurst, NMSS

CWolf, OCA

SBurnell, OPA

DPiskura, R3

ADAMS Accession No.:

LTR: ML26120A548

e-Concurrence case: 20260430-70032